

REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1, 4-33 and 36-53 are now present in the application. Claims 1, 4 and 33 have been amended. Claims 2, 3, 34 and 35 have been respectively incorporated in claims 1 and 33 and hereby cancelled. Claims 1 and 33 are independent. Reconsideration of this application, as amended, is respectfully requested.

Allowable Subject Matter

The Examiner has indicated that dependent claims 5-32 and 37-53 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. Applicants greatly appreciate the indication of allowable subject matter by the Examiner.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-4 and 33-36 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Johansson, U.S. Patent No. US 2002/0044549. This rejection is respectfully traversed.

In light of the foregoing amendments, Applicants respectfully submit that this rejection has been obviated and/or rendered moot. As the Examiner will note, independent claims 1 and 33 have been amended to respectively incorporate claims 2 and 3 (for claim 1) and 34 and 35 (for claim 33).

Independent claim 1 now recites a combination of steps including "providing a plurality of piconets, each of which comprises a plurality of Bluetooth units, including one master unit and a plurality of slave units; and linking the piconets using the slave units to form a scatternet

ring, wherein the slave units act as a bridge to connect the piconets; wherein the piconet linking step uses a centralized formation mechanism to form the scatternet ring, and the scatternet ring is a closed single-ring Bluetooth network connected by a circle of piconets.”

Independent claim 33 now recites a combination of elements including “a plurality of piconets arranged in a circle, wherein each of the piconet comprises a plurality of Bluetooth units, including one master unit and a plurality of slave units linking the piconets to form a scatternet ring, wherein the slave units act as a bridge to connect the piconets, and wherein the scatternet ring is formed by a centralized formation mechanism, and the scatternet ring is a closed single-ring Bluetooth network connected by a circle of piconets.”

Applicants respectfully submit that the above combinations of steps and elements as set forth in amended independent claims 1 and 33 are not disclosed nor suggested by the reference relied on by the Examiner.

Applicants respectfully submit that the architecture of Johansson’s scatternet is different from the scatternet ring of the claimed invention. In particular, as shown in FIG. 15 of Johansson, a combination of multiple piconets is disclosed. However, the scatternet disclosed in Johansson does not form a closed single-ring structure. Therefore, Johansson fails to teach “the piconet linking step uses a centralized formation mechanism to form the scatternet ring, and *the scatternet ring is a closed single-ring Bluetooth network connected by a circle of piconets*” as recited in claim 1 and “the scatternet ring is formed by a centralized formation mechanism, and *the scatternet ring is a closed single-ring Bluetooth network connected by a circle of piconets*” as recited in claim 33.

In addition, the closed single-ring Bluetooth network (*i.e.*, the scatternet ring of the claimed invention) packet routing can be implemented in a simple and efficient way. Because of the closed single-ring structure of the scatternet ring, packet routing can be further facilitated through either an upstream routing or a downstream routing. This feature is clearly absent from Johansson.

Applicants also respectfully submit that the nodes serving as bridges of piconets in Johansson are different from those of the claimed invention. In particular, as shown in Fig. 15 of Johansson, a *master node* can act as a bridge of two piconets. Unlike Johansson, the piconets are linked *using the slave units* to form a scatternet ring, wherein the slave units act as a bridge to connect the piconets. In other words, the bridges can only be set up by dual-slave devices, *i.e.*, *a node act as a slave in two different piconets*. Therefore, Johansson fails to teach “linking the piconets using the slave units to form a scatternet ring, wherein *the slave units act as a bridge to connect the piconets*” as recited in claim 1 and “a plurality of slave units linking the piconets to form a scatternet ring, wherein *the slave units act as a bridge to connect the piconets*” as recited in claim 33, because the piconets linking by nodes acting as a master or slave behave differently from the piconets linking by nodes acting as a dual-slave device when routing packets.

Since Johansson fails to teach each and every limitation of amended independent claims 1 and 33, Applicants respectfully submit that claims 1 and 33 and their dependent claims clearly define over the teachings of Johansson. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102 are respectfully requested.

CONCLUSION

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but merely to show the state of the prior art, no further comments are necessary with respect thereto.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

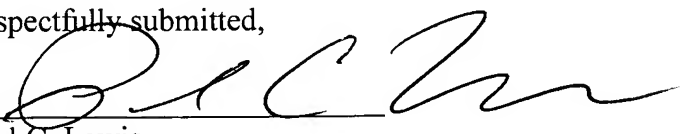
In the event there are any matters remaining in this application, the Examiner is invited to contact Cheng-Kang (Greg) Hsu, Registration No. 61,007 at (703) 205-8000 in the Washington, D.C. area.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants respectfully petition for a two (2) month extension of time for filing a response in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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